VISES
PUMPS

19 15

THE FULTON
MACHINE & VISE CO.
LOWVILLE, N.Y. U.S.A.

Fulton Machine & Vise Co.

Lowville, N. Y., U.S.A.

VISES

"F & R" "PEERLESS" "STAR"

PUMPS

Belt, Engine and Motor Driven
Centrifugal Pumps

—

Deer River Plows

Core Punches

Pulp Stone Truing Lathes

—

This Catalogue supersedes all former issues
Destroy old Catalogue

SURPLESS, DUNN & CO.
Direct Sales Representatives

74-76 Murray Street
New York

34 North Clinton Street
Chicago

1915

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Introductory

WITH an unbroken record for superiority of product since incorporation, we offer our Catalogue for 1915 with the assurance that the present high standard of our goods will be maintained and that our service will be more prompt and efficient, due to our improved methods of manufacturing and increased facilities.

Our Experience

WE have been making vises and pumps for a number of years, and today our goods embody all the improvements suggested by years of actual use under every imaginable condition. We make a specialty of vises and are the only concern doing so. We own our foundry and machine shop and construct the entire vise ourselves. Almost without exception our competitors in the vise business hire their vises made or buy their castings from other concerns. We are therefore in position to save you one profit, furnish better finished vises and we know absolutely that our vises are all we claim for them. They can be found in constant use in many of the leading industrial plants and railroad shops of the United States and Canada. This of itself constitutes the best sort of a guarantee that our vises are all that we claim for them.

Guaranty

We expressly agree to repair or replace, free of charge, any of our goods we sell which shall at any time be found to have been defective in workmanship or material. We are able to give this unqualified guaranty, and cheerfully do so, solely

because we have perfected our product through many years' experience, because we put into them only the best materials to be had, and because our large force of employees have become experts in their line of work and are held to the strictest accountability for the proper execution of their individual share in the making of our goods.

Thirty Days' Trial

We offer to send one or more of our vises to any responsible house on 30 days' trial, subject to approval in every respect. If it is found upon trial that our vises fail to meet every claim which we make for them in this catalogue and guaranty, they may be returned, and we will pay freight charges both ways. This trial is free from expense in every way, so that any one who desires to test our goods will run no risk whatever in accepting this proposition. We are also willing to send our vises on trial in competition with any other make, the customer to be the judge as to which make will best suit his requirements.

To the Trade

All previous price lists and trade circulars are superseded by this 1915 catalogue.

Quotations are subject to change without notice, but we will do our utmost to advise the trade of such changes.

All orders accepted and all agreements or contracts are contingent upon strikes, fires, accidents or causes beyond our control.

Goods delivered to carriers in good order, and so receipted for, releases us from further responsibility.

Defective goods will be replaced or credited at invoice price.

Claims for shortage or deductions must be made within 10 days of receipt of goods.

Goods cannot be returned unless by special arrangement and then subject to discount and expense.

Special order work is not subject to cancellation after once under way.

Vises

IN the manufacture of vises we aim to produce nothing but a high class article, combining strength and finish. *All our vises have welded cast steel faced jaws.*

Several brands of vises are on the market with renewable or removable cast steel face which is claimed to be a favorable feature of the vise. Such vises do not and cannot possess the strength of a vise REINFORCED with cast steel properly welded to the casting.

To insert a removable steel the casting must be cut away and whether fastened with screws or pins gives no added strength to the vise.

We also call attention to the fact that the face of a good vise jaw DOES NOT WEAR OUT or need renewing and should the corrugations wear smooth and the jaws fail to grip the work before the life of the vise is gone (which our experience has not proven to be the case) the same can be recut for practically the same expense as the cost of a new set of removable steels.

"F. & R."

Machinists Pattern

Cast Steel Faced Jaws, Tempered

This vise has the advantage of two complete swivels, a combination of the two giving the most desirable positions for the use of a mechanic.

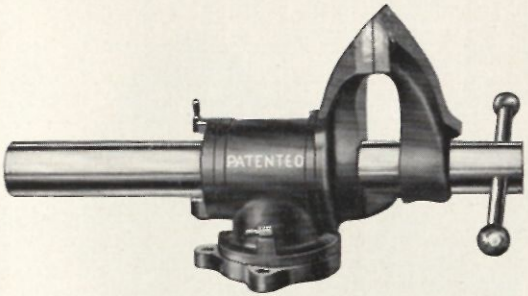
The vise is locked at any angle by two separate methods. One by clamping the work within the jaws which tightens the frictions and the other by the use of the position pins. With both in use the vise is POSITIVELY locked in any position. **The jaws of the F. & R. vise are always held in place when work is removed by the position pins,** if the operator requires, by the use of which the vise is made **stationary** at any angle.

PRICE LIST

Always use numbers when ordering

No. *2	Jaws 2 in.	Opens 2 in.	Wgt.	6½	lbs.	Price	$ 4.00
No. 3	Jaws 3½ in.	Opens 5 in.	Wgt.	37	lbs.	Price	9.50
No. 4	Jaws 4 in.	Opens 5⅞ in.	Wgt.	56	lbs.	Price	11.75
No. 5	Jaws 4½ in.	Opens 6½ in.	Wgt.	70	lbs.	Price	14.00
No. 6	Jaws 5 in.	Opens 7 in.	Wgt.	89	lbs.	Price	21.50
No. 7	Jaws 6 in.	Opens 9 in.	Wgt.	155	lbs.	Price	31.00

*Note—No. 2 vises have no pins or position stops.

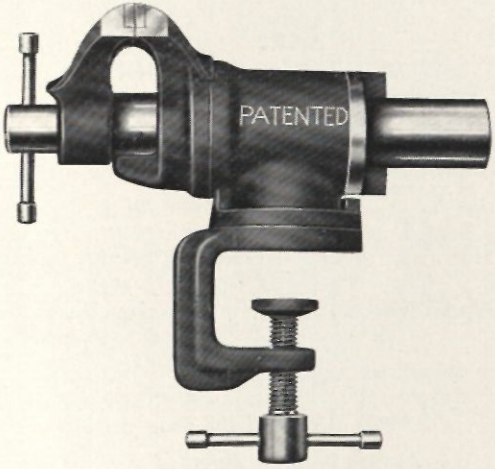


"F. & R."

Coachmakers Pattern

PRICE LIST

No. 8 Jaws 4½ in. Opens 9 in. Wgt. 64 lbs. Price **$14.50**



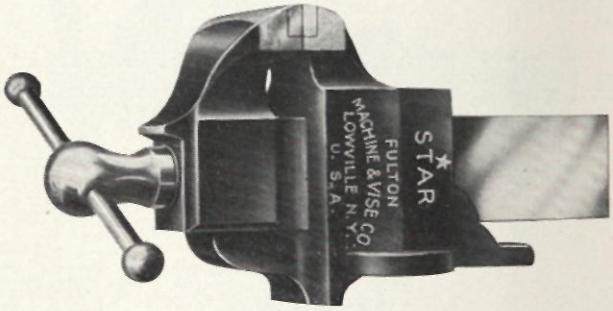
"F. & R."

Auto and Motor Boat Vise

Width of Jaws 2 in. Open 2 in. Wgt. 7½ lbs.

PRICE LIST

Jaws and Finished Parts, Plain ..... **$ 8.50**
Jaws and Finished Parts, Nickeled **10.00**



"Star"

Parallel Jaw, Machinists Vise

Solid Base

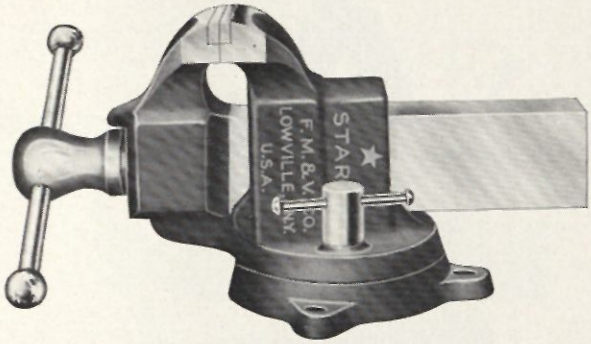
Cast Steel Faced, Tempered Jaws

Our "Star" brand is our heaviest pattern, strongest vise and combines the most desirable features of the several types of regular bench vises. Our guarantee is stronger than the strongest. Our prices are lower than the lowest, quality considered.

PRICE LIST — Solid Base

Always Order by Number

No. 825	Jaws 2½ in.	Opens 3½ in.	Wgt. 17 lbs.	Price	$ 4.75
No. 8½	Jaws 3 in.	Opens 4 in.	Wgt. 20 lbs.	Price	6.00
No. 9	Jaws 3½ in.	Opens 5½ in.	Wgt. 28 lbs.	Price	7.00
No. 10	Jaws 4 in.	Opens 6 in.	Wgt. 42 lbs.	Price	8.50
No. 11	Jaws 4½ in.	Opens 7 in.	Wgt. 54 lbs.	Price	10.00
No. 12	Jaws 5 in.	Opens 8 in.	Wgt. 72 lbs.	Price	13.00
No. 13	Jaws 6 in.	Opens 10 in.	Wgt. 135 lbs.	Price	25.00



"Star"

Parallel Jaw, Machinists Vise

Swivel Base

Cast Steel Faced, Tempered Jaws

This vise can be swiveled to any desired position.

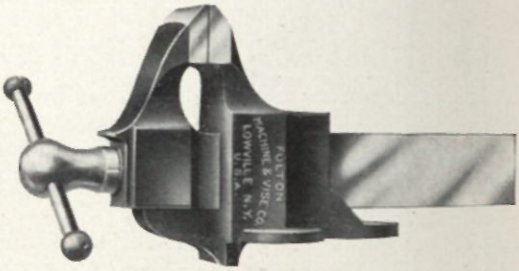
The base is locked by a taper head bolt, which locks it as firmly as the jaws are locked.

These vises cannot wobble or chatter when in use, as the bolt takes up all lost motion.

Our guarantee is stronger than the strongest. Our prices are lower than the lowest, quality considered.

PRICE LIST—Swivel Base

No. 1825	Jaws 2½ in.	Opens	3½ in.	Wgt.	20 lbs.	Price	**$ 5.20**
No. 18½	Jaws 3 in.	Opens	4 in.	Wgt.	28 lbs.	Price	**7.50**
No. 19	Jaws 3½ in.	Opens	5½ in.	Wgt.	36 lbs.	Price	**8.75**
No. 20	Jaws 4 in.	Opens	6 in.	Wgt.	50 lbs.	Price	**10.50**
No. 21	Jaws 4½ in.	Opens	7 in.	Wgt.	64 lbs.	Price	**12.50**
No. 22	Jaws 5 in.	Opens	8 in.	Wgt.	82 lbs.	Price	**16.00**
No. 23	Jaws 6 in.	Opens	10 in.	Wgt.	153 lbs.	Price	**30.00**

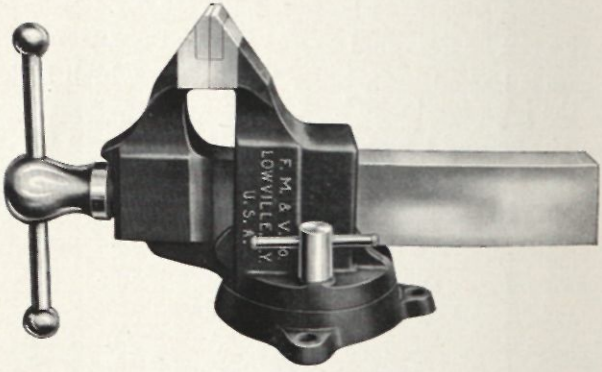


"Star"

Coachmakers Vises
Cast Steel Faced Jaws
Solid Base

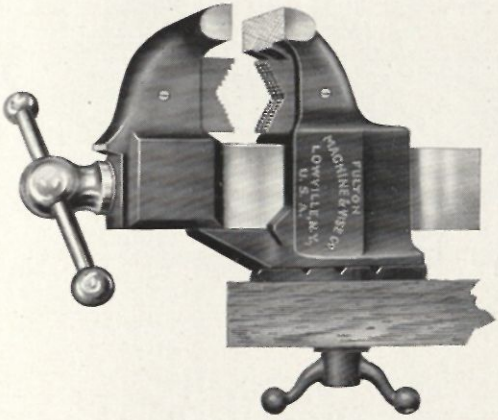
PRICE LIST

No. 14 Jaws 4¼ in. Opens 9 in. Wgt. 48 lbs. Price $9.50



Swivel Base

No. 18 Jaws 4¼ in. Opens 9 in. Wgt. 58 lbs. Price $11.50



"Fulton"

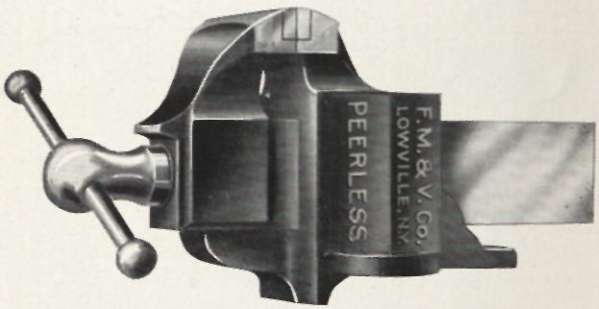
Combination Pipe Vise

Tempered Cast Steel Faced Jaws

This vise has ample weight and strength and is fitted with removable pipe jaws. These jaws are made of a special grade of steel and will give maximum service.

PRICE LIST

No. 15	Jaws 3⅜ in.	Wgt. 50 lbs.	Cap. 0-2 in.	Price	**$16.00**
No. 16	Jaws 4¼ in.	Wgt. 72 lbs.	Cap. 0-3 in.	Price	**20.00**
No. 17	Jaws 5 in.	Wgt. 125 lbs.	Cap. 0-4 in.	Price	**28.00**



"Peerless"

Solid Base Machinists Vises

Cast Steel Faced Jaws

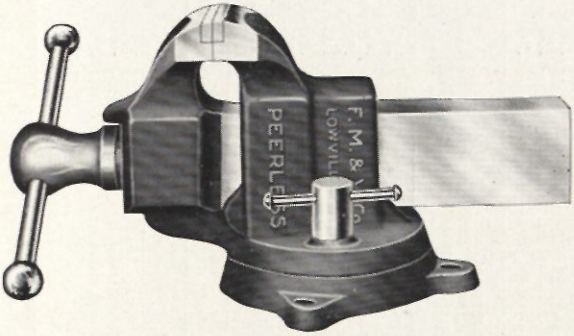
The Best Vises for the Money in America Barring None

The consumer gets more vise for his money in the Peerless line than any other vise now on the market. **We say this without fear of contradiction.** **See explanation on next page.**

Peerless cannot be matched — a dependable vise, at an exceptionally low price.

PRICE LIST — Solid Base

No. 245	Jaws 3 in.	Opens 3½ in.	Wgt. 17 lbs.	Price	**$ 6.00**
No. 25	Jaws 3½ in.	Opens 4 in.	Wgt. 22 lbs.	Price	**7.00**
No. 26	Jaws 4 in.	Opens 5½ in.	Wgt. 28 lbs.	Price	**8.50**
No. 27	Jaws 4½ in.	Opens 6 in.	Wgt. 42 lbs.	Price	**10.00**
No. 28	Jaws 5 in.	Opens 7 in.	Wgt. 52 lbs.	Price	**13.00**
No. 29	Jaws 5½ in.	Opens 8 in.	Wgt. 72 lbs.	Price	**18.50**



"Peerless"

Swivel Base Machinists Vises

Cast Steel Faced Jaws

The "Peerless" brand is the same in every respect, finish, material and construction as the "Star," except that you have a **lighter weight vise.**

As an example: Our No. 19 "Star" vise has a 3½ inch face jaw; the No. 31 "Peerless" is the same vise with a 4 inch jaw.

Where the class of work is not too severe, such as filing, etc., a "Peerless" vise will answer every purpose and save cost as we practically furnish a 4 inch vise at the price of a 3½ inch.

PRICE LIST—Swivel Base

No. 295	Jaws 3 in.	Opens 3½ in.	Wgt. 20 lbs.	Price	**$ 7.50**
No. 30	Jaws 3½ in.	Opens 4 in.	Wgt. 28 lbs.	Price	**8.75**
No. 31	Jaws 4 in.	Opens 5½ in.	Wgt. 36 lbs.	Price	**10.50**
No. 32	Jaws 4½ in.	Opens 6 in.	Wgt. 52 lbs.	Price	**12.50**
No. 33	Jaws 5 in.	Opens 7 in.	Wgt. 64 lbs.	Price	**16.00**
No. 34	Jaws 5½ in.	Opens 8 in.	Wgt. 85 lbs.	Price	**22.00**

Price List of Extras (Vises Only)

F. & R. Machinists and Woodworkers Pattern

Catalogue Numbers	Sliding Jaws	Back Jaws	Saddle	Screw and Lever	Base	Nut	Friction Block	Collar and Screw
Auto and Motor Boat Vise Extras same as No. 2.								
2	$2.00	$1.50	2.00	$1.00	$1.00	$ .60	$ .60	$ .20
3	3.00	3.00	2.75	1.25	2.25	1.00	.75	.20
4	3.75	3.75	3.25	1.50	3.00	1.25	1.00	.20
5	4.00	4.00	3.75	1.75	3.60	1.40	1.10	.25
6	6.00	6.00	4.00	2.25	3.75	1.50	1.25	.25
7	8.00	8.00	5.25	3.50	4.00	1.75	1.40	.30
8	4.50	4.50	3.75	1.75	3.60	1.40	1.10	.20

Star Machinists and Woodworkers Pattern

Catalogue Numbers	Sliding Jaws	Stationary or Swivel Base Body	Screw and Lever	Swivel Base	Nut	Collar and Screw	Cent. Bolt for Base	Taper H'd Clmp. Bolt	Side Clamp Nut with Lever
825 –1825	1.25	$1.50	$ .75	$ .75	$ .45	$ .20	$ .45	$ .20	$ .30
8½– 18½	1.50	2.00	1.00	.75	.50	.20	.50	.25	.40
9 – 19	2.00	2.50	1.25	1.00	.55	.20	.55	.30	.45
10 – 20	2.50	3.00	1.50	1.25	.60	.20	.60	.35	.50
11 – 21	3.25	3.75	1.75	1.75	.65	.25	.65	.40	.60
12 – 22	4.50	4.75	2.00	2.00	.75	.25	.75	.45	.75
13 – 23	7.50	8.00	2.75	3.00	1.00	.30	1.00	.60	1.25
14 – 18	3.00	3.50	1.50	1.50	.60	.20	.60	.35	.50

Peerless Machinists Pattern

245 – 295	$1.50	$ 2.00	$1.00	$ .75	$ .50	$ .20	$ .50	$ .25	$ .40
25 – 30	2.00	2.50	1.25	1.00	.55	.20	.55	.30	.45
26 – 31	2.50	3.00	1.50	1.25	.60	.20	.60	.35	.50
27 – 32	3.25	3.75	1.75	1.75	.65	.25	.65	.40	.60
28 – 33	4.50	4.75	2.00	2.00	.75	.25	.75	.45	.75
29 – 34	5.50	6.00	2.25	2.50	1.00	.25	1.00	.50	1.00

Combination Machinists and Pipe Jaws

Cat'logue Numbers	Sliding Jaw	Main Body	Swivel Base Stud	Swivel Base Plate	Swivel Base Washer	Swivel Base Nut	Screw and Lever	Collar & Screw	Front Pipe Jaws, Each	Back Pipe Jaws, Pair	Main Vise Nut
15	$3.00	$3.00	$ .30	$ .30	$ .15	$ .35	$1.25	$ .25	$ .50	$ .75	$.55
16	4.50	4.50	.35	.50	.15	.35	1.50	.25	.60	.90	.65
	6.25	6.25	.40	.75	.20	.40	2.00	.30	.75	1.00	.75

Centrifugal Pumps

OUR type of Centrifugal Pumps has been used for many years. The designs of our present centrifugals are the result of what long experience has taught us represents the best construction for a pump of this type.

All our pumps are carefully inspected and tested at eighty pounds water pressure before shipment.

CENTRIFUGAL PUMPS have superior merit for general pumping in any location where the pump can be placed close to the water supply. For Irrigation, Sewage, Reclamation, Water Supply, Wrecking, Excavating, Caissons, Dry Docks, Pulp and Paper Mills, Mine Station, and Sinking Pumps, Surface Condensers, Fire and Underwriters' Pumps and Chemical Plants these Pumps will give satisfactory service.

We maintain that in any location adapted for the installation of a plain centrifugal where all costs for a period of years are included, a well designed pump of this type will prove more economical than any other pump made at the present time.

We claim for our pump, strength, simplicity, free running bearings, easy access to stuffing box, split glands, which are easily rebabbited when worn, ring oiling bearings, best of material throughout and economy of power.

When bolting pump to foundation be careful not to spring the frame. If you do the pump will run hard and the bearings will heat.

Be sure the suction pipe is absolutely air tight.

Be sure to run the pump in the right direction.

Use only long sweep elbows and use as few as possible.

Set pump as near the water as possible.

If water is to be forced through long pipes or many elbows are used, speed should be increased to correspond. Larger size pipe and fittings will save power.

For elevations in excess of 60 feet pumps will be furnished extra heavy at slight additional cost.

Friction and Power

TO find theoretical horse-power required to elevate water, multiply the gallons pumped per minute by the head in feet, and by 8.33 (weight of one gallon of water), and divide the product by 33,000. To this must be added a certain amount according to efficiency of pump; it is usual to double the theoretical power, which would be correct for 50 per cent. efficiency.

By "head" is meant the actual elevation in feet from surface of suction water to point of discharge, plus the friction head in suction and discharge pipes and elbows.

The following examples will show the importance of using large pipes in order to save power: A 6-inch pump delivers 1,200 gallons per minute elevating 20 feet; combined length of suction and discharge pipe is 100 feet and of 6-inch pipe. Referring to table, it will be found that a velocity of 12 feet per second in 6-inch pipe is equal to 1,200 gallons, or practically 1,200 feet per second in 6-inch pipe is equal to 1,200 gallons, or practically 1,200. The corresponding friction head is for the 100 foot lengths of pipe 8.8 feet; therefore, the total head is 20 feet plus 8.8 feet, or 28.8 feet. Figuring power as above and allowing 50 per cent. efficiency, it will be found that power required to drive pump is 15.26 horse-power, and speed required is about 410 revolutions per minute.

If, instead of 6-inch pipe, 8-inch had been used, with same size pump, a velocity of less than 7 feet per second would be obtained in the pipe and corresponding friction head less than 2.38 feet, and therefore total head 22.38 feet instead of 28.8 feet. The power required is 11.86 horse-power as against 15.26, and speed of pump 360 revolutions per minute as against 410 as above, a saving in power of over 22 per cent.

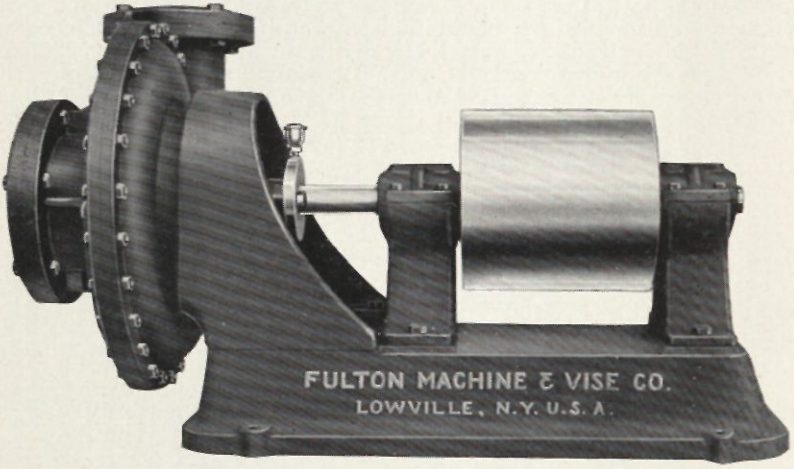
It is well to bear in mind that if above results as regards power and capacity are to be obtained the pump must be run at right speed; by running at higher speeds a larger quantity of water will be obtained, but at a sacrifice of power, due to reduced pump efficiency. It is therefore important, if economical work is wanted, that pumps should not be expected to deliver larger quantities of water than those given as the right capacity in the various tables of this catalogue.

When pumps are placed above water level it is necessary to prime them in starting. We recommend a flap valve on the discharge pipe or a foot valve on the end of the suction pipe.

We do not recommend that our customers attempt to draw water by suction over 25 feet. It costs more to draw water by suction than it does to force water above the pump.

To convert water pounds pressure into water feet elevation multiply by 2.31.

To convert water feet into pounds pressure multiply by .434.



Left-Hand Pattern

Swing Case Pump

We Make these Pumps Right or Left

For Sizes and Prices See Next Page

This type of pump can be placed so that the outlet will discharge at any point of the circle. This advantage will oftentimes save an elbow and consequent friction which saves power.

Fitted with ring oiling bearings, split glands and generous size shafts.

Table of speeds, Page 23.

Swing Case Pump

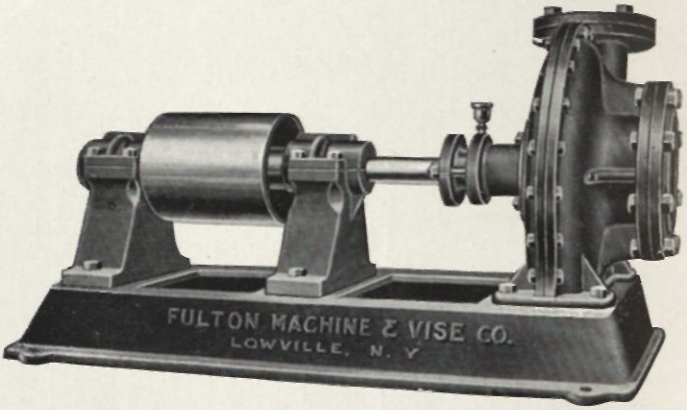
PRICE LIST

No.	Suction	Dis.	Capacity	H.P. for each ft. lift	Pulley		Weight Lbs.	Code Word	Price (Iron)
					Dia.	Face			
1½	2	1½	75 to 100	.03	5	5	135	*Yak*	$ 45.00
2	2½	2	145 to 165	.05	6	6	195	*Yaw*	85.00
2½	3	2½	180 to 250	.085	6	6	300	*Yawl*	95.00
3	4	3	250 to 350	.126	8	8	400	*Yeast*	110.00
4	5	4	475 to 600	.2	8	8	425	*Yelp*	135.00
5	6	5	755 to 900	.26	10	10	800	*Yew*	185.00
6	8	6	1,200 to 1,800	.53	12	12	925	*Yoke*	240.00
8	10	8	2,000 to 3,000	1.40	14	14	1,000	*Yon*	375.00
10	12	10	3,000 to 4,000	1.90	18	16	1,800	*Youth*	500.00
12	14	12	4,000 to 5,000	2.30	18	16	2,200	*Yule*	600.00

Floor space required practically same as Standard Horizontal Pump.

We can furnish this type of pump in brass if required. Prices on application.

Please Note:—Brass Pumps have cases, runner, shaft, glands, stuffing-box and flanges brass. Stands, pulley and base are iron.



Right-Hand

Standard Horizontal Pump

We Make these Pumps Right or Left

For Sizes and Prices See Next Page

This is the type of pump most extensively used for all purposes. All our pumps are fitted with ring oiling bearings except the number one.

We carry a large stock at all times and are prepared to make prompt shipments.

We always ship right-hand pumps unless otherwise specified.

Table of speeds on Page 23.

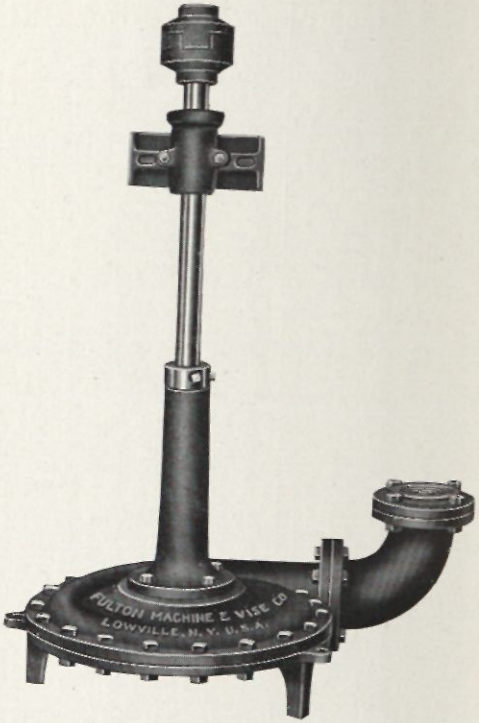
Brass Pumps:—See Note bottom Page 19.

Standard Horizontal Pumps

PRICE LIST

No.	Diameter Discharge Opening	Suction Flange	Economical Capacity in Gallons per Minute	H.P. for each foot lift	Pulley		Weight Lbs.	Floor Space Required Over All	Code Word (Iron)	Code Word (Brass)	Price (Iron)	Price (Brass)	Primer Extra	Foot Valve Extra	Brass Foot Valves
					Dia.	Face									
1	1	1¼	35	.015	3	3	50	12 x 14	*Ware*	*Orb*	$30.00	$ 55.00	$.....	$....	$.....
1½	1½	2	75	.03	5	5	120	15 x 23	*Wad*	*One*	35.00	65.00	15.00	5.00	8.00
1¾	2	2	90	.04	5	5	120	15 x 23	*Wife*	*Oft*	50.00	80.00	15.00	6.00	8.50
2	2	2½	140	.05	6	6	170	17 x 27	*Walk*	*Once*	70.00	125.00	20.00	7.00	9.00
2½	2½	3	180	.085	6	6	190	18 x 28	*Wall*	*Ore*	80.00	150.00	20.00	8.00	12.00
3	3	4	260	.126	8	8	400	23 x 36	*Wand*	*Ox*	110.00	175.00	25.00	9.00	15.00
4	4	5	475	.2	8	8	435	24 x 42	*War*	*Oat*	130.00	275.00	30.00	12.00	21.00
5	5	6	755	.26	10	10	650	29 x 48	*Ward*	*Old*	165.00	350.00	40.00	15.00	26.00
6	6	8	1,200	.53	12	12	725	30 x 50	*Wasp*	*Oak*	200.00	410.00	45.00	20.00	30.00
8	8	10	2,000	1.40	14	14	1,200	37 x 56	*Wax*	.....	310.00	.....	65.00	30.00	40.00
10	10	12	3,000	1.90	18	16	1,600	38 x 58	*Web*	.....	395.00	.....	75.00	40.00	50.00
12	12	14	4,200	2.30	18	16	2,100	48 x 60	*West*	.....	500.00	.....	.....	50.00	65.00
15	15	18	8,000	4.40	20	18	4,500	56 x 70	*Well*	.....	700.00	.....	.....	75.00	110.00

We furnish these pumps with outlet same size as suction if desired, but do not carry same in stock.



Standard Vertical Pump

Made Right or Left

Iron or Brass

For Sizes and Prices See Next Page

This pump should stand on bottom of well or cistern and it should be submerged. We furnish one box and coupling.

Table of speeds, see Page 23.

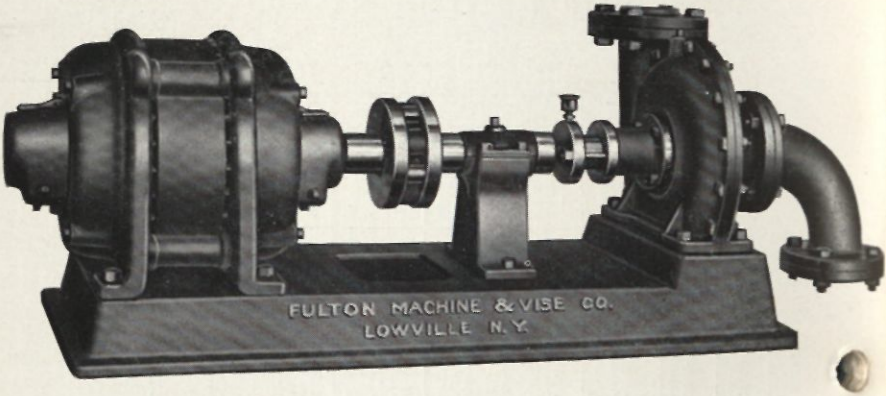
Standard Vertical Pump

PRICE LIST

No.	Suction	Dis.	Economical Capacity	Horse Power Required to lift 1 foot	Weight Lbs.	Price (Iron)	Price (Brass)	Code Word (Iron)	Code Word (Brass)
1½	2	1½	75	.03	85	**$30.00**	$55.00	*Ax*	*Gig*
1¾	2	2	85	.04	110	**45.00**	70.00	*And*	*Gat*
2	2½	2	145	.05	120	**60.00**	110.00	*Ann*	*Get*
2½	3	2½	180	.09	150	**70.00**	135.00	*Ace*	*Gem*
3	4	3	250	.126	260	**75.00**	150.00	*Alice*	*Gad*
4	5	4	475	.22	370	**110.00**	240.00	*All*	*Gaw*
5	6	5	755	.36	400	**140.00**	315.00	*Abe*	*Girl*
6	8	6	1,200	.55	480	**170.00**	360.00	*Ape*	*Gang*
8	10	8	2,000	1.40	800	**260.00**	.....	*Asa*	.....
10	12	10	3,000	1.90	1,200	**330.00**	.....	*Air*	.....
12	14	12	4,000	2.45	1,600	**420.00**	.....	*Axel*	.....
15	18	15	8,000	4.35	3,500	**600.00**	.....	*Arbor*	.....

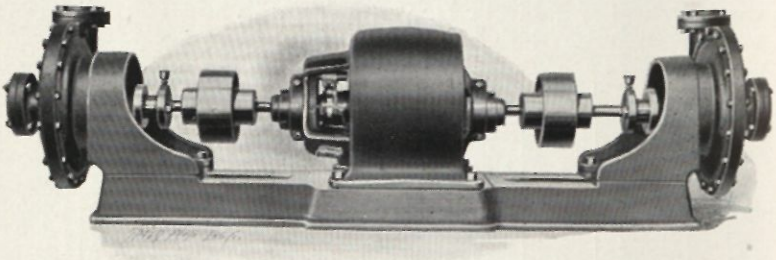
Table of Speeds at which Standard Horizontal, Swing Case, Vertical and Motor Driven Pumps should run to raise water to different heights.

No.	10 ft.	12 ft.	16 ft.	20 ft.	25 ft.	35 ft.	40 ft.	50 ft.	60 ft.	70 ft.
1	1,200	1,250	1,350	1,500	1,700	1,900	2,000	2,200	2,400	2,600
1½	700	750	850	950	1,000	1,150	1,200	1,300	1,400	1,500
1¾	675	720	820	895	970	1,115	1,165	1,270	1,380	1,480
2	525	570	645	715	875	903	955	1,053	1,143	1,220
2½	470	520	595	670	715	870	935	1,005	1,095	1,155
3	420	445	495	545	645	845	910	985	1,065	1,135
4	345	395	445	495	595	795	885	915	989	1,015
5	325	375	425	459	545	745	855	895	955	1,000
6	235	295	355	415	485	575	605	645	695	740
8	220	245	305	355	385	445	470	495	540	580
10	215	240	280	315	355	410	430	460	510	540
12	200	225	260	290	320	375	290	425	475	500
15	170	190	225	250	290	340	350	380	425	460



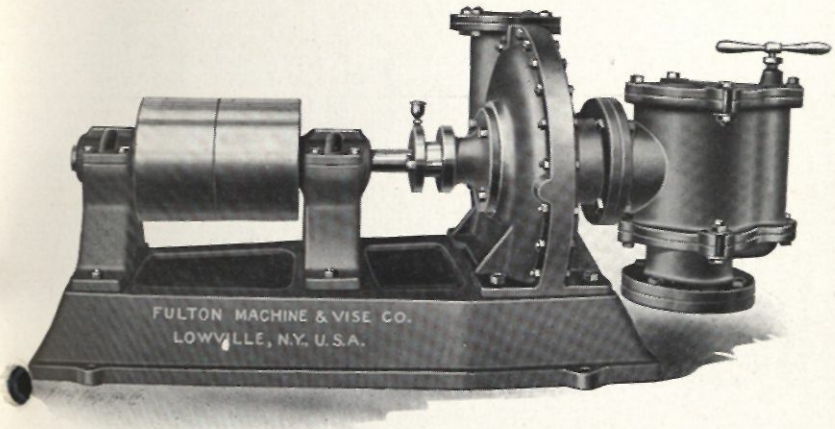
Standard Pump

Connected to A. C. motor. Made up on order and connected to any kind or size motor.



This pump, either motor or belt drive, made in any size. Used for pumping separate kinds of liquids, hot and cold water, or can be piped from one end to the other and used as a stage pump.

Prices for above outfits named on application.



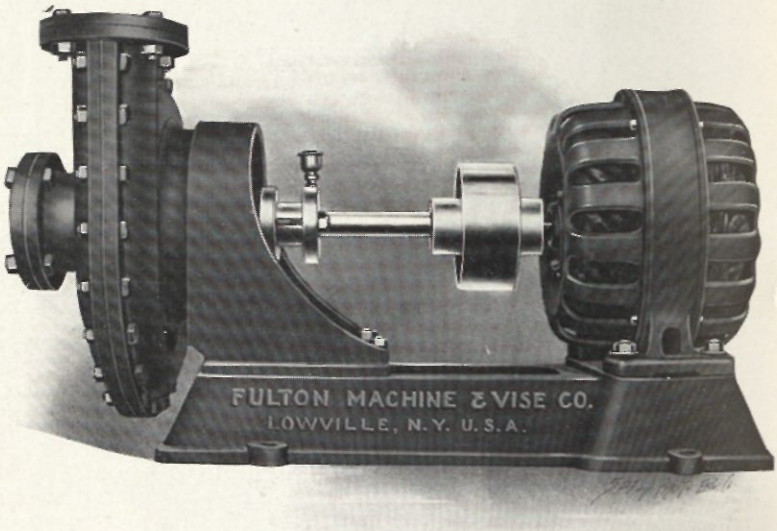
Standard Horizontal Pumps

Fitted with Tight and Loose Pulleys and Primer

Pumps furnished tight and loose pulleys at a slight advance in price. Primers extra, see list.

Foot Valve and Strainer

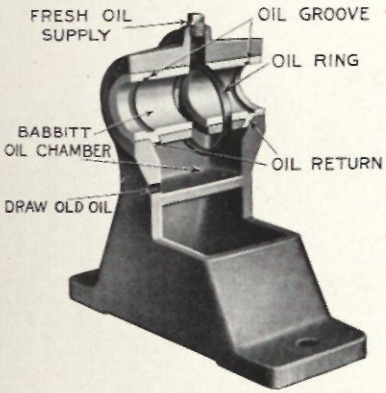
No.	Iron Price	Brass Price
1½	$ 5.00	$ 8.00
1¾	6.00	8.50
2	7.00	9.00
2½	8.00	12.00
3	9.00	15.00
4	12.00	21.00
5	15.00	26.00
6	20.00	30.00
8	30.00	40.00
10	40.00	50.00
12	50.00	65.00
15	75.00	110.00
18	110.00	140.00



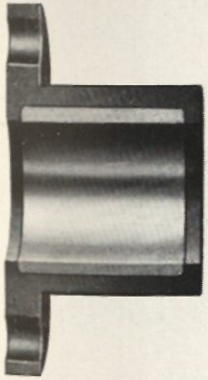
Swing Case, Motor Driven Pump

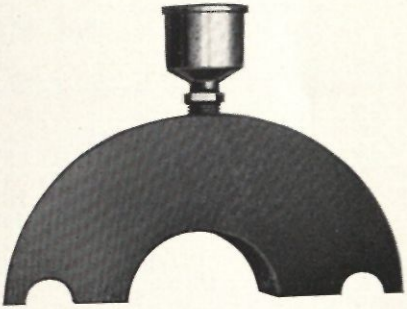
Prices Quoted on Application

For gas or steam engine, or for motor connection. We will furnish pumps with or without engine or motor and shall be pleased to name prices on any special pumping outfit upon request.

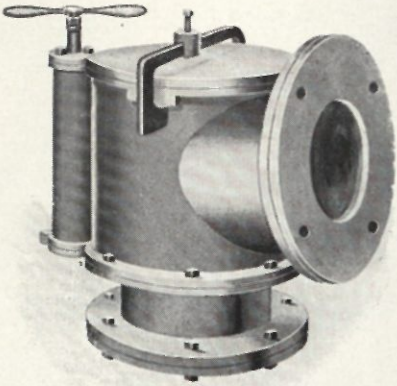


Sectional View of our Ring Oiling Bearing





Split Gland used in our pumps. Can be easily removed and rebabbitted.

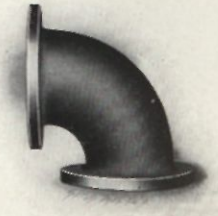


PRICE LIST

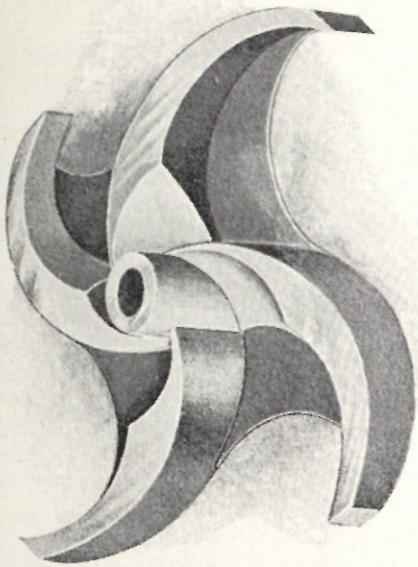
2	inch.....	$15.00
2½	inch.....	20.00
3	inch.....	20.00
4	inch.....	25.00
5	inch.....	30.00
6	inch.....	40.00
8	inch.....	45.00
10	inch.....	65.00
12	inch.....	75.00

Improved Hand Primer

Size	Price	Size	Price
1½	$5.00	5	$11.75
2	5.75	6	14.00
2½	6.25	8	23.75
3	7.00	10	36.00
4	9.25	12	50.00
		15	80.00



Flanged Long Radius Elbows



Impeller

Our impeller has web at back and will pump thick fluids as well as water.

Standard Companion Flanges

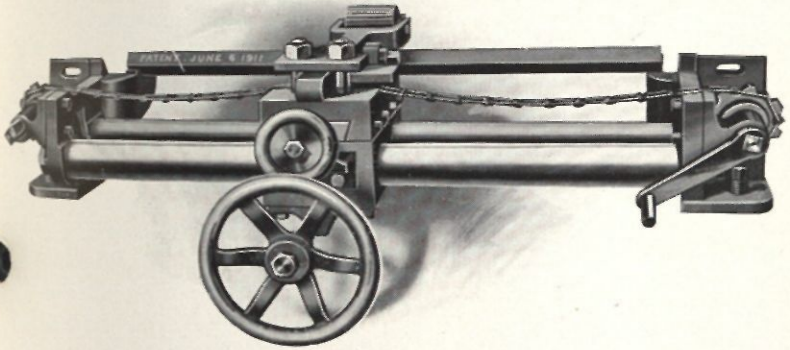
PRICE LIST

1 inch	$1.25	5 inch	$ 3.65
1¼ inch	1.35	6 inch	4.00
1½ inch	1.40	8 inch	6.50
2 inch	1.50	10 inch	9.25
2½ inch	2.00	12 inch	12.50
3 inch	2.25	15 inch	21.00
4 inch	3.00	18 inch	31.00

Pump Extras

PRICE LIST

	No. 1 List	No. 1½ List	No. 1¾ List	No. 2 List	No. 2½ List	No. 3 List	No. 4 List	No. 5 List	No. 6 List	No. 8 List	No. 10 List
Swing Case Base	$10.00	$15.00	$15.00	$20.00	$22.00	$25.00	$28.00	$36.00	$40.00	$60.00	$80.00
Standard Base	10.00	12.00	15.00	20.00	22.00	28.00	30.00	38.00	42.00	54.00	75.00
Stand	3.00	5.00	6.00	9.00	10.00	11.00	11.50	12.00	12.00	14.00	18.00
Pulley	1.75	2.50	2.50	4.00	4.00	5.25	5.25	7.00	9.50	12.50	19.50
Bearing Cap	.....	1.50	2.50	2.50	3.00	4.00	4.50	5.00	6.00	7.00	8.00
Gland	2.00	4.00	4.50	4.75	5.00	5.50	6.00	8.00	10.00	11.00	12.00
Plain Case	6.00	8.00	10.00	11.00	12.00	15.00	20.00	30.00	45.00	60.00	80.00
Suction Case	6.00	9.00	11.00	12.00	14.00	18.00	25.00	38.00	55.00	70.00	100.00
Discharge Flange	1.25	1.40	1.50	1.50	2.00	2.25	3.00	3.65	4.00	6.50	9.25
Suction Flange	.....	.....	1.50	2.00	2.25	3.00	3.65	4.00	6.50	9.25	12.50
Shaft	3.00	4.00	4.50	5.00	6.00	7.00	8.00	9.00	10.00	12.00	15.00
Runner	2.00	3.00	3.50	4.00	5.00	6.00	8.00	10.00	12.00	16.00	20.00
Vert. Sleeve	4.00	6.00	6.00	8.00	8.00	10.00	12.00	14.00	14.00	18.00	18.00
Clutch Coupling	4.50	6.00	6.50	7.00	8.00	10.00	12.00	15.00	19.00	25.00	.....
Vert. Bearing	2.00	2.50	2.75	4.00	4.50	5.00	5.50	6.00	6.00	7.00	.....
Collar	.60	.65	.65	.80	.80	1.00	1.20	1.40	1.40	1.60	1.80
Stuff. Box	.....	3.00	3.50	4.00	5.00	6.00	7.00	8.00	9.00	10.00	12.00
Hood	6.00	10.00	10.00	12.00	15.00	18.00	20.00	25.00	28.00	32.00	38.00



Potter Pulp Stone Truing Lathe

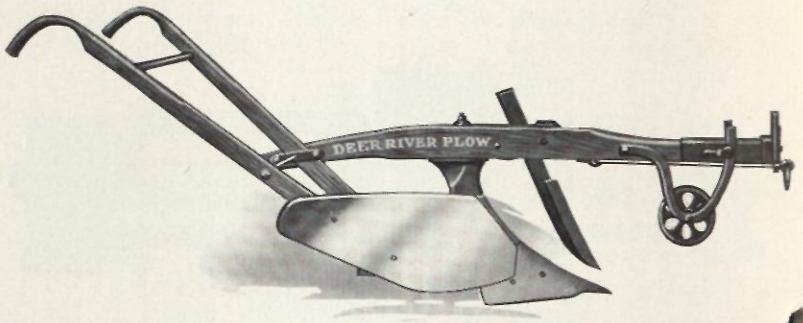
Patented

This lathe is very rigid and keeps the stone sharp and true, thereby saving sliver waste and time, and the life of the stone is increased. It increases production by a large per cent. and feeds automatically.

We shall be pleased to furnish any information on this tool or refer to satisfied users.

Bearings bronzed bushed.

Price, $100.00.



Deer River Plow

This plow has been manufactured for over thirty years. It has stood the test and has made for itself a reputation of being the best walking plow ever made.

Other plows have been brought out and exploited but any farmer that has ever used the Deer River Plow cannot be induced to accept other makes.

Heavy red birch beams, with natural wood finish, no paint to cover defective timber, heavy cast steel moldboards, with soft center, tempered and polished, oak handles, cast steel coulter and the BEST materials throughout.

PRICE LIST

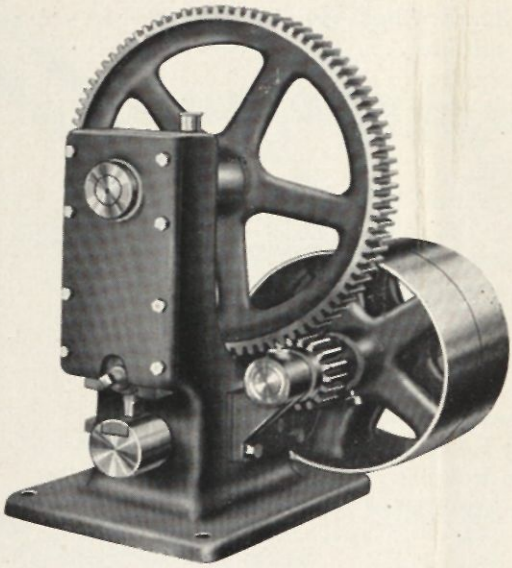
No. 1	Deer River Plow, 2 horse, cast steel M. B., cast L. S.	**$13.50**
No. 1	Deer River Plow, 2 horse, cast steel M. B., steel L. S.	**14.00**
No. 2	Deer River Plow, 1 horse, cast steel M. B., cast L. S.	**13.00**
No. 2	Deer River Plow, 1 horse, cast steel M. B., steel L. S.	**13.50**

Extras on next page.

Extras "Deer River" Plow

PRICE LIST

Standard	$2.75
Mould Board, (Steel No. 1 and 2)	4.00
Cast Landslide	1.00
Steel Landslide	1.00
Landslide Shoe	.50
Coulter (Cast Steel)	1.00
Coulter Clasp	.35
Draft Rod and Ring	.75
Draft Rod Staple	.25
Clevis Hook with Bolt	.25
Patent Clevis	.18
Beam Cap	.15
Cog End	.15
Wheel	.35
Wheel and Wrought Arms	1.00
Handle Rods	.15
Handle Rounds	.15
Wheel Arm Clasps	.35
Beam	2.50
Beam Handle	.60
M. B. Handle	.75
Grape Vine Rod	.50
Joint Bolt	.10
Plow Bolts	.05
Wrench	.15
King Bolt	.25
Spreading Rod	.25
Common Points, No. 1 and 2	.50
Wide Points, No. 1 only	.60
Coulter Points, No. 1 only	.75
Handle Plates	.15
Clevis Iron and Wrench	.75
Jointer	1.50

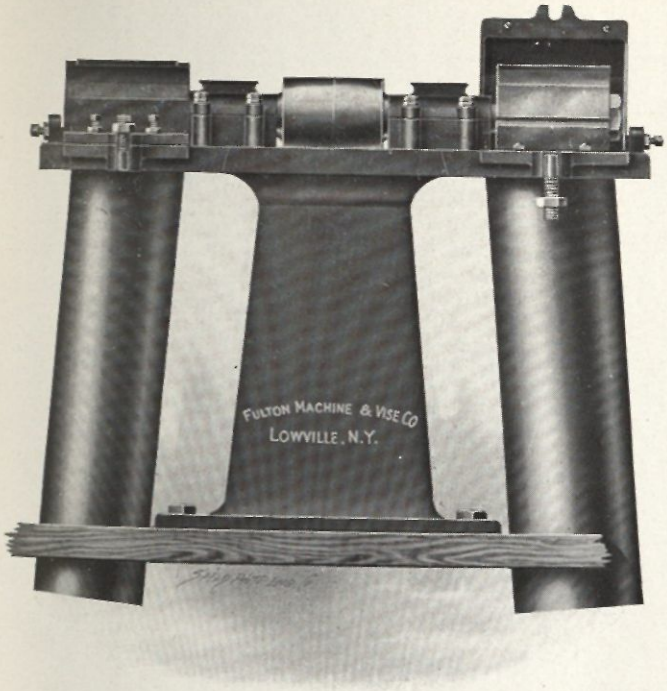


Core Punch

This machine is used for punching slots either $\frac{5}{8}$ inch or $\frac{3}{4}$ inch wide in the end of pipe used by paper mill manufacturers for cores on which to wind paper.

Tight and loose pulleys, 12 inch diameter, 4 inch face.

Price, **$100.00.**



Slab and Edging Barker

This machine saves its costs many times at any place where spruce lumber is manufactured. Many mills are today burning or selling their slabs and edgings, and it is this part of the tree that makes the best pulp. It has a far better fibre for sulphite than the heart. Bark your edgings and slabs on our BARKER and sell them to the Sulphite Companies. These machines have two heads, each requiring an operator. The capacity of the machines is four cords per day, and the machines represent a very small outlay for the work accomplished. We can refer you to many mills that are using our Barkers. Write for further descriptions.

Price, **$100.00.** Weight, 800 lbs.

WE have a first-class foundry, pattern and machine shop. We will contract to furnish any special machines or castings, either iron or brass. Inquiries solicited and estimates cheerfully furnished.

THE ART PRESS COMPANY
SYRACUSE N Y